

**What is claimed is:-**

1. An antenna comprising an element formed from conductor patterns on a plurality of layers of a multilayer PCB, wherein the conductor patterns are in stacked relation and interconnected through the PCB.  
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2. An antenna according to claim 1, wherein the element is located at the edge of the PCB.
- 10 3. An antenna according to claim 2, wherein the PCB is apertured adjacent to the element.
- 15 4. An antenna according to claim 1, wherein the PCB is apertured adjacent to the element.
- 15 5. An inverted-F antenna according to claim 1, comprising an F-shaped conductor pattern on a first layer of the PCB and an I-, L- or F-shaped conductor pattern on the or each other layer, wherein the or each I-shaped conductor pattern is substantially coextensive with the "upright" of the F-shaped conductor pattern.  
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6. An antenna according to claim 5, wherein the or each I-, L- or F-shaped conductor pattern extends along the edge of the PCB.
- 25 7. An antenna according to claim 6, wherein the PCB is apertured between the "upright" of the F-shaped conductor pattern and a ground plane area.  
8. An antenna according to claim 7, wherein the PCB has a slot between the "upright" of the F-shaped conductor pattern and a ground plane area.
- 30 9. An antenna according to claim 1, including an antenna ground plane comprising a plurality of vias connecting ground plane regions on respective PCB layers.

10. An antenna according to claim 9, wherein the element is located at the edge of the PCB.

11. An antenna according to claim 10, wherein the PCB is apertured adjacent to  
5 the element.

12. An antenna according to claim 11, wherein the PCB is apertured adjacent to the element.

10 13. An inverted-F antenna according to claim 9, comprising an F-shaped conductor pattern on a first layer of the PCB and an I-, L- or F-shaped conductor pattern on the or each other layer, wherein the or each I-shaped conductor pattern is substantially coextensive with the "upright" of the F-shaped conductor pattern.

15 14. An antenna according to claim 13, wherein the or each I-, L- or F-shaped conductor pattern extends along the edge of the PCB.

15. An antenna according to claim 14, wherein the PCB is apertured between the "upright" of the F-shaped conductor pattern and a ground plane area.

20 16. An antenna according to claim 15, wherein the PCB has a slot between the "upright" of the F-shaped conductor pattern and a ground plane area.

25 17. A mobile phone including an antenna comprising an element formed from conductor patterns on a plurality of layers of a multilayer PCB, wherein the conductor patterns are in stacked relation and interconnected through the PCB.

18. An antenna according to claim 17, wherein the element is located at the edge of the PCB.

30 19. An antenna according to claim 18, wherein the PCB is apertured adjacent to the element.

20. An antenna according to claim 17, wherein the PCB is apertured adjacent to the element.

21. An inverted-F antenna according to claim 17, comprising an F-shaped conductor pattern on a first layer of the PCB and an I-, L- or F-shaped conductor pattern on the or each other layer, wherein the or each I-shaped conductor pattern is substantially coextensive with the "upright" of the F-shaped conductor pattern.

22. An antenna according to claim 21, wherein the or each I-, L- or F-shaped conductor pattern extends along the edge of the PCB.

23. An antenna according to claim 22, wherein the PCB is apertured between the "upright" of the F-shaped conductor pattern and a ground plane area.

15 24. An antenna according to claim 23, wherein the PCB has a slot between the "upright" of the F-shaped conductor pattern and a ground plane area.

25 25. An antenna according to claim 17, including an antenna ground plane comprising a plurality of vias connecting ground plane regions on respective PCB 20 layers.

26. An antenna according to claim 25, wherein the element is located at the edge of the PCB.

25 27. An antenna according to claim 26, wherein the PCB is apertured adjacent to the element.

28. An antenna according to claim 27, wherein the PCB is apertured adjacent to the element.

30 29. An inverted-F antenna according to claim 25, comprising an F-shaped conductor pattern on a first layer of the PCB and an I-, L- or F-shaped conductor

pattern on the or each other layer, wherein the or each I-shaped conductor pattern is substantially coextensive with the “upright” of the F-shaped conductor pattern.

30. An antenna according to claim 29, wherein the or each I-, L- or F-shaped

5 conductor pattern extends along the edge of the PCB.

31. An antenna according to claim 30, wherein the PCB is apertured between the "upright" of the F-shaped conductor pattern and a ground plane area.

10 32. An antenna according to claim 31, wherein the PCB has a slot between the  
“upright” of the F-shaped conductor pattern and a ground plane area.